Tourism development and the tourism area life-cycle model: A case study of Zhangjiajie National Forest Park, China

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Abstract

The conceptual framework of the Tourism Area Life Cycle (TALC) has been frequently examined since it was first proposed by Butler in 1980. However, few studies have applied the concept to national parks and other protected areas. This paper examines the applicability of the model to China’s Zhangjiajie National Forest Park. In addition, both external and internal factors affecting the park’s tourism development as well as the environmental, social, and economic changes of the area are also discussed. Results indicate that the park has experienced the first four stages as described in Butler’s 1980 seminal paper [The concept of a tourist area cycle of evolution: Implications for management of resources. Canadian Geographer, 24, 5–12]. Currently, the park is in the consolidation stage. Both governments and the private sector are major players as catalysts for the park’s tourism development from one stage to the next. While the local or even regional economy has become increasingly dependent on tourism, the park has also been experiencing noticeable transformation and loss of traditional cultures since its inception in 1982. Finally limitations to the current paper are outlined.

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1. Introduction

The conceptual framework of the Tourism Area Life Cycle (TALC) has been frequently examined since it was first proposed by Butler in 1980. The recent edited two volumes on the model (Butler, 2006a, 2006b) further highlights its significance as one of the most used frameworks within tourism studies. Lagiewski (2006), in reviewing previous studies, listed a total of 49 major works related to the TALC. These studies have examined the model at different units of analysis, ranging from a single tourist resource (e.g., Niagara Falls, Getz, 1992) to a destination of varied features (e.g., Lancaster County, Hovinen, 1981; Hovinen, 2002; Canada’s NW Territories, Keller, 1987; the Greater Yellowstone region, Johnson & Snapenger, 1993; and the Smoky Mountain region, Tooman, 1997). In addition, the model has also been applied to differing types of tourism attractions and resources (i.e., islands, coastal resorts/beaches, mountainous destinations, etc.) and from different perspectives (i.e., the validity and applicability of the TALC, Agarwal, 1997; social, environmental and/or economic changes as they relate to each stage of the model, Berry, 2001; Hovinen, 2002; Tooman, 1997; and tourism planning, Bao & Zhang, 2006; Getz, 1992; etc.). The TALC, as examined in these studies, was generally proven to be a useful framework in explaining the dynamics of tourism development for a resort, although a universal consensus about its validity and applicability has not yet been achieved.

Obviously, more studies need to be conducted to test the model (Agarwal, 1997; Berry, 2001) and as Butler (2006a, 2006b) pointed out in his concluding chapter in the two volumes, an “understanding [of the way that tourist destinations develop] is still far from complete” (p. 286). The authors of this paper would argue that special attention should be paid to areas to which the model has
been rarely applied (i.e., national parks or other peripheral areas), particularly those in developing countries with a rapid economic growth. A number of reasons prompt this observation. First, the majority of existing studies are of coastal/island destinations with few being focused on national parks and other protected areas (albeit there are two exceptions, e.g., Boyd, 2006; Weizenegger, 2006). Yet parks are important places for the protection of ecological systems and natural resources as well as for the provision of recreational and tourism opportunities for the public. This is particularly true for those areas assigned World Heritage status (Boyd, 2006). Because of the nature of these areas, governmental interventions could affect the direction and speed of tourism development for these places more than in the case of an island resort (Weizenegger, 2006). Second, the robustness of the model has been tested primarily in North America, UK, and Mediterranean areas where tourism development has a long history and has obtained its existing situation over an extended period of development (Baum, 1998).

Relatively few studies have been undertaken in developing countries where newly emerging tourism destinations might reach the maturity stage within a short time period as noted by Baum (1998, p. 169; also see Baum, 2006): It is arguable that the model has rather less value, except perhaps of a cautionary nature, to newly emerging tourism destinations, particularly in the developing world. Here the development period is likely to have been much more rapid and, with the added force of globalisation and multi-national investment, may well have ‘jumped’ one or more stages within the model cycle.

Finally, Johnson and Sneepenger (2006) also emphasized that more studies should be conducted of “…other settings with … different economic transitions …, which could all provide valuable insight into the changing nature of tourism impacts and destination maturation processes” (p. 234). China, the world’s largest developing country with the fastest economic growth, could provide such a setting in which the development processes of a newly emerging tourism destination in a remote and underdeveloped region can be analyzed in relation to the macroeconomic change in the whole country.

In response to the above concerns, this paper applies the TALC to China’s first national forest park—Zhangjiajie National Forest Park (ZNFP). The ZNFP is chosen for three reasons. First, the park is a single tourism destination established in 1982 and located in a remote mountainous area with a single dominant tourism resource, unique sandstones. Also a tourism destination could refer to a resort, a town, city, region, or country and no universal consensus has been achieved among researchers with regard to which unit of analysis is the most appropriate. It can be envisaged that studies based on differing units of analysis could generate differing outcomes as suggested in previous studies. Hovinen (2002), in examining tourism development in Lancaster County, a diverse destination using the TALC, argued that “Butler’s hypothesized stages may fit certain single-attraction destinations well” (p. 220). Second, while it is recognized that a major challenge in testing the TALC for many destinations is the difficulty in obtaining accurate long-term trend data of visitors to these areas (Butler, 1980; Hovinen, 2002; Lagiewski, 2006), this is not a problem for a park where visitors can only enter through controlled gates. Thus, as with many other parks in China (cf. Bao & Zhang, 2006), the ZNFP has kept a complete and reliable record of tourist numbers since its inception. Additionally, the park has also documented tourism revenues for each year. Finally, the park has been extensively examined during the past two decades in terms of tourism’s impacts on the environmental, economic, and social–cultural aspects associated with the park. This provides a solid basis for the current study.

Agarwal (1997) pointed out that research on the TALC should focus on either one of two aspects: (a) testing the applicability of the model and (b) redeveloping the model to incorporate different issues (as cited in Lagiewski, 2006). In reality, most studies combined the two. This approach is also followed in this study. Specifically, three aspects of the model are examined: (1) the validity and applicability of the model as applied to the tourism development evolution of the park, (2) external and internal forces that shaped tourism development in the park and surrounding areas, and (3) environmental, social, and economic changes as they relate to each stage of the model. In this paper, the TALC is examined against observed development trends (cf. Getz, 1992; Agarwal, 1997). To examine these issues, Getz’s (1992) approach of using existing documents and previous research findings, combined with direct interviews, field and map observations, and questionnaire surveys are adopted.

2. TALC model

It is not the purpose of this section to provide a comprehensive review of literature on the model (please refer to Lagiewski, 2006; Butler, 2006a, 2006b for a detailed summary of findings), rather this section is to provide a foundation for what our study seeks to accomplish. Thus, previous findings on the aforementioned three aspects of the study are the focus of the following review.

2.1. Validity and applicability of the TALC

The TALC proposed by Butler (1980) involves a six-stage evolution of tourism, namely exploration, involvement, development, consolidation, stagnation, and post-stagnation. This last stage is further characterized by a period of decline, rejuvenation, or stabilization. The applicability of the model to a given area has been assessed and judged in previous studies by looking at how well the
evolution of a tourist destination’s development matched the six phases conceptually described by Butler.

According to Butler (1980, p. 10), “not all areas experience the stages of the cycle as clearly as others.” This suggests that the model cannot be applied to all destinations in the same uniform manner. This argument was endorsed by previous studies wherein stages experienced by many destinations were not consistently found and findings were very case specific (Agarwal, 1997; Cooper & Jackson, 1989). For instance, Meyer-Arendt’s (1985) study of the Grand Isle resort of Louisiana, Cooper and Jackson’s (1989) study of the Isle of Man, and some other studies (e.g., Berry, 2006; Smith, 1992; Wilkinson, 1987) demonstrated that the life cycle for these destinations matched the model very well. In addition, an interesting study by Boyd (2006) on the establishment and development of Canadian national parks as a whole also conformed to the six phases of the TALC, yet this said, the author still noted the difficulty of determining “where individual cases may be best represented within the model” (Boyd, 2006, p. 138). That is, the six stages were not found to be consistently experienced by each individual park.

As is the case for individual parks in Canada, there are many other destinations that did not entirely conform to the model. For instance, Atlantic City missed the first two stages (Stansfield, 1978) and the Cayman Islands in the Caribbean skipped the first (Weaver, 2000). In addition, previous studies also found that different stages could coexist for a tourism destination. For example, Lancaster County, as a diverse destination, was characterized by the coexistence of growth, stagnation, decline, and rejuvenation (Hovinen, 1981; Hovinen, 2002). Similarly, Niagara Falls, as a single tourism resource destination, “evolved into a permanent state of maturity in which aspects of consolidation, stagnation, decline, and rejuvenation are interwoven and constant” (Getz, 1992, p. 752).

2.2. External and internal factors affecting the TALC

Although the TALC is a useful concept for describing the evolution of tourism development, what stages and/or duration of a stage will be experienced by a tourism destination is largely subject to a number of factors, and therefore, no perfect formula can be applied to different areas. Butler (1980, p. 11) observed that “...the shape of the curve must be expected to vary for different areas, reflecting variations in such factors as rate of development, ... government policies, and number of similar competing areas.” Additionally, many other factors can affect the shape of the model, including political unrest, terrorism, and natural disasters among others. These factors can be categorized into two groups: internal and external factors (Agarwal, 1997). Internal factors include those inherent to a destination (i.e., uniqueness of resources and attractions, local residents and their attitudes toward tourism development, and gradual deterioration of tourism resources) and associated management, service practices, and qualities. Butler (1980, p. 9) argued that “only in the case of the truly unique area could one anticipate an almost timeless attractiveness.” That is, a destination with a unique tourism resource(s) can permanently attract tourists so long as external factors detrimental to tourism industry do not occur (i.e., natural disasters). If this is true for a destination, then it is less likely to decline permanently. In contrast, the rise and fall of the destination (i.e., Niagara Falls, Getz, 1992; Huangshan Mountain and the Great Wall, Bao, 1998) is more likely to be experienced because tourism, as an open system, is highly responsive to many other external factors (Gunn & Var, 2002).

Among the external factors that have been examined in previous studies are producers, consumers, and regulating authorities (cf. Keller, 1987). For instance, individual entrepreneurs usually play an important role in introducing new elements to the life cycle and in helping to rejuvenate parts of the industry as evidenced in Lancaster County (Hovinen, 2002) and the Gold Coast in Australia (Russell & Faulkner, 1999; for a detailed discussion of this issue, please refer to Russell, 2006). In addition to entrepreneurs, tour operators can also play a significant role in the TALC. A study of Cyprus by Ioannides (1992) indicated that a few large tour operators contributed significantly to the growth of tourism growth through charter flights and inclusive tour packages. Similarly, another study of Paradise Island, Bahamas, undertaken by Debbage (1990), showed how multinational corporations controlled and influenced visitor flow to the area through imperfect competition and oligopoly.

In the case of consumers, visitors’ changing preferences and needs are partial driving forces for the rise and fall of a destination (Butler, 1980). For instance, the emergence of the demand for pursuing nature-based tourism or ecotourism in the past two decades has made protected areas and national parks, (which are often peripherally located), into popular tourism destinations in both developed and developing countries. Finally, for regulating authorities, the rate of tourism development in the three island nations of Papua New Guinea, the Solomon Islands, and Vanuatu was significantly influenced by the pre- and post-independent government of these nations (Douglas, 1997). Another example of government’s role in tourism development is Cyprus (Ioannides, 1992) where tourism was used as a means for economic diversification stimulated by the government through economic incentives and loan programs. In addition, the Cypriot government also took measures to reduce the tourist growth rate and regulate the geographic distribution of lodging development.

2.3. Environmental, social, and economic changes as related to the TALC

Environmental, social, and economic situations of a tourism area will inevitably change over time as an area moves from the exploration to the post-stagnation stage
(Butler, 1980). More often than not it is found that the economic gains of a destination are concomitant with an increased decline in an area’s environmental quality and an increasing loss in the authenticity of local culture and customs.

In the context of parks, according to Boyd (2006, p. 125), “user levels are low and no noticeable impact occurs on the environment” in the exploration and involvement stages. However, a growth in visitor numbers to a park means yet more facilities and services are required, which may in turn pose threats to the ecological integrity of park resources or even result in the transformation of a natural environment into an urbanized area. For instance, Banff National Park in Canada has suffered a serious environmental deterioration as a result of human impacts. The town of Banff with a population of 7600 in the 1990s is “located in some of the highest quality wildlife habitat in the park” (Banff-Bow Valley Study, 1996, p. 137). By 2002 the population had increased to approximately 9000 (Clevenger, Wierzchowski, Chruszcz, & Gunson, 2002). Likewise, the gateway communities surrounding Yellowstone have experienced rapid and uncontrolled development since the early 1980s (Ansson, 1998). Within the 18 million-acre Greater Yellowstone Ecosystem, the population has increased by over 12% since 1990 to more than 322,000 people in 1998. Communities in the Yellowstone region were largely urbanized as a result of tourism development. Environmental problems associated with tourism urbanization such as pollution, smog, crime, and overcrowded condition are now not unknown in the Yellowstone region (Ansson, 1998).

In terms of tourism development on social change, a plethora of studies have been conducted to examine residents’ attitudes toward tourism development (see Harrill, 2004 for a literature review on this topic). Butler (1980) noted that attitudes held by local residents toward visitors and tourism development may undergo a process from euphoria through apathy and irritation to antagonism as suggested by Doxey (1976) in his “irridex.” This inverse relationship between development of the life-cycle stages and resident impacts was also supported by Martin and Uysal (1990). In addition, Tooman (1997) observed that under circumstances in which tourism becomes the dominant economic sector (regardless of the particular stage), social welfare indicators failed to show significant improvement.

Finally, in the case of economic development across the six stages of the TALC, income tends to increase rapidly from the involvement to the development stage. In the meantime, parallel to the increasing income is an increased tourism income leakage from locals to outside investors (Tooman, 1997). During the consolidation stage, the local economy will be dominated by tourism (Butler, 1980) and a few large-scale, corporate enterprises become the dominant economic participants (Tooman, 1997).

The question thus arises—are these effects noticeable in the case of a National Park in China?

3. The study area

The ZNFP is located in the north-western Hunan province, China, approximately 30 km from Zhangjiajie City (former Dayong town and Dayong City) and 385 km from Changsha, the capital city of the province. The park lies between 110°24′–110°28′E and 29°17′–29°21′N, covering an area of 4810 ha. It was the first national forest park established in 1982 by the State Council of China. It was then combined with two adjacent nature reserves, Suoxiyu Nature Reserve and Tianzi Mountain Nature Reserve, to be ascribed status as a World Heritage Site by UNESCO in 1992 under the title ‘Wulingyuan Scenic and Historic Interest Area’ (WSHIA). More recently, the park was assigned two more titles, National Geological Park in 2000 by the Ministry of Land and Natural Resources and World Geological Park by UNSECO in 2004. Consequently, at least three agencies, State Forestry Administration (forest parks), Ministry of Construction (scenic areas), and Ministry of Land and Natural Resources (geology parks) are directly involved in the area’s management (Deng, Bauer, & Huang, 2003).

The ZNFP is most known for a unique natural landscape characterized by thousands of quartzite sandstone pillars, ranging from 50 to 300 m in height, extending from the valley floor. These pillars are distributed in the park’s six scenic zones: Yellowstone Village, Gold Whip Stream (GWS), Kidney Village, Shadao Ravine, Pipa Stream, and Yuanjiajie (Fig. 1). These pillars and adjacent scenery can be viewed through hundreds of scenic spots and viewing platforms in the park. Currently, sightseeing by the world’s highest sightseeing lift, cable cars, bus shuttles, or hiking is the most prevalent tourism activity in the park. With its combined charm of uniqueness, elegance, wildness, serenity, and mysteriousness, the park attracts millions of tourists from both China and abroad.

The area is also home to a large amount of rare and endangered flora and fauna, and is a valuable place for environmental education and scientific research. In addition, the park and surrounding areas are also rich in cultural and historic resources. The majority of local residents consist of several unique ethnic groups (i.e., the Tujia, Bai, and Miao) who have been living in the area for thousands of years (Gu & Zhong, 2005).

4. Research methods

Triangulation is used for this study, whereby data are collected through personal in-depth interviews, questionnaire surveys, and secondary data sources. Survey results reported in this study are part of a comprehensive study about the park. In-depth interviews were conducted from July 2004 to November 2005. During this time period, we visited the main attractions and surrounding facilities in the park and interviewed 22 individuals with diverse backgrounds. Interviewees were asked to answer questions like “How has the park been developed since its
establishment in 1982?" and "What are the consequences of tourism transformation in the park?" among others. The interviewed individuals are two Zhangjiajie City officers, five park managers and staff, five professors from three universities, three local tour guides, three local residents, and four visitors. Some of their comments are incorporated in appropriate places in the latter part of this paper.

In addition, two questionnaire surveys were undertaken between March 2004 and November 2005. The first is about visitors' perceptions of tourism development of the park and its impacts on their tourism experience as well as on local communities. This structured and self-administered survey was conducted at the main scenic spots of the park, where visitors were randomly approached. Those who agreed to participate were provided with a questionnaire that asked about their trip characteristics, tourism motivations, perceptions of tourism development, and perceptions of the authenticity of local cultures. A total of 480 visitors were approached and 400 of them were willing to participate. Of these, 73 participants did not fully complete their questionnaires. These incomplete questionnaires were then excluded from analysis. Thus, data analyses were conducted based on 327 usable questionnaires.

This survey found females (55.9%) numbered slightly more than males (44.1%). The majority of participants were young (62.1% aged below 39 years), with the mean of 32.6 years. Most participants were also well educated (67.9% had a university degree). In addition, 33.3% of participants had an annual family income over 25,000 RMB.

The majority (71.9%) of participants reported a stay in the park for 3 days or more, with the average length of stay being 3.6 days. Most participants (72.7%) were first time visitors while another 27.3% had visited the park more than twice. This percentage is comparable to recorded intention to revisit, for 32.3% of respondents intended to visit again.

The second survey examined how local residents have been affected as a result of tourism development related to the park. The survey was administered at two villages under the jurisdiction of the park: Zhangjiajie village and Yuanjiajie village. According to the park census data of 2003, Zhangjiajie village had 1527 residents in 455 households, and Yuanjiajie had 404 residents in 136 households. A stratified random sampling method was used to identify participants. A copy of the questionnaire was then given to those households identified using this approach. The survey was conducted face to face in these households. Each household was asked to complete the questionnaire by any member over 18 years of age in the household. A total of 29 questionnaires collected from those 200 households were not completed or were left blank, resulting in 171 usable questionnaires for further analysis.

The majority of respondents from this survey have lived in the area for quite a long time with the average length of residency being 15.1 years. The average family members were 4.6 persons, of whom two were working in tourism related businesses or services. In addition, most household members had a lower level of education with 3.0 members on average holding a high school degree or less. The reported total annual family income in 2004 varied from a minimum of 2000 RMB to a maximum of 100,000, with the average being 25,958 RMB. In the same year, the average tourism related income was 15,788 RMB, ranging from 0 to 80,000 RMB. Thus, the average tourism related income accounted for 60.8% of total family income in 2004.

The main secondary data sources are publications (i.e., peer-reviewed journals, books, news articles, environmental reports, etc.) about the park which are largely available in Chinese. Maps used in this study include a topographic map (scale: 1/10,000) published in 1983, a land use map

Fig. 1. Geographical location of Zhangjiajie National Forest Park.
5. Results

5.1. Tourism development stages and pushing factors

Zhangjiajie was famous for its unique scenery long before the area was officially established as a national forest park in 1982. For instance, as early as the Song Dynasty (960–1279), Zhangjiajie was visited by poets who were astonished by the unique beauty of the area as stated in their poems (Gu & Zhong, 2005). However, the area was not known as a popular tourism destination until the early 1980s. The following is a description of the tourism development process for the park.


The park was formerly a state run forest farm established in 1958 under the jurisdiction of Dayong County. Planting and logging were the two main activities of the forest farm before 1978. This practice of forestry gradually changed after 1978 when Chen Ping, a staff member with the Forestry Department of Hunan province, published a paper, “Travel in Zhangjiajie” in a national magazine, China Forestry, to introduce the natural scenery to the public for the very first time (Gu & Zhong, 2005; Zheng, 1999). However, the park did not draw wide public attention until 1980 when the Hunan Daily published an essay titled “Zhangjiajie: An Undiscovered Scenic Jewel” by Wu Guangzhong, a famous Chinese painter, who described Zhangjiajie as incomparable when measured against many other famous Chinese mountains (Gu & Zhong, 2005). His comments were substantiated by other painters and photographers who were also attracted to the area, making the area even more publicized through their publications and photographic exhibitions.

During this period, there was no road/trail construction or facilities developed for tourists although painters, photographers, journalists, scientists, and other adventurers and explorers came often to visit the area. According to Liu (1999), a total of 88,000 individuals visited the forest farm during this time. Approximately 1000 of them visited the farm on a single day: October 1 (the National Day of China), 1980 (Gu & Zhong, 2005). The annual average arrivals were 29,333 people at this stage.

Local government quickly realized that developing tourism could generate huge economic gains both locally and regionally. During this short time period, several leaders from the provincial government (i.e., the general secretary and governors) and the Ministry of Forestry (renamed as China State Forestry Administration in 1997) visited the farm. They emphasized the importance of a scenic zone plan, the maintenance of natural beauty, and the construction and expansion of roads connecting the farm to Dayong, the then county seat of Dayong County. In addition, they examined the feasibility of tourism development in the park. In October 1980, Dayong County decided to increase accommodation facilities, maintain and repair roads, and solve the problem of electricity shortages to meet the increasing demands and needs of tourists (Gu & Zhong, 2005). In the same year, an administrative sector responsible for tourism development of the area was created in the county. In December 1981, a nationwide forest tourism symposium held by the then Ministry of Forestry in Beijing prepared a “Memorandum on Forest Tourism Development” which listed the farm as one of seven forest tourism pilot test places in the country. In the same year, officers from the China National Planning Committee and the then Ministry of Forestry proposed the farm be set aside as a national forest park (Gu & Zhong, 2005).

5.1.2. Involvement stage (1982–1988)

Due to the unique landscape and scenery of the forest farm being increasingly publicized through those pioneers, yet more visitors were attracted to this forest farm. The increasing number of informal visitors and the direct economic benefits they brought to the area led the farm to be officially established as a national forest park in September, 1982. From 1982 to 1988, a total of 2,215,100 visitors were attracted to the park (Fig. 3) with annual average arrivals being 316,443, about 11 times the number for the exploration stage.

Facilities began to be built to accommodate increasing visitors. In 1982, the first hotel, Golden Whip Hotel with 260 beds was opened (Table 1). In 1984, a major road was built to connect the park with its nearest town: Dayong (renamed as Dayong City in 1985 and Zhangjiajie City in 1994), making the park more accessible for visitors arriving from across the country. In the same year, a railway was constructed to connect the city to other parts of the country through the national railway network. The railway then became the primary access point to the city during this period (Zheng, 1999). The construction of the railway was

<table>
<thead>
<tr>
<th>Year</th>
<th>Beds</th>
<th>Hotels</th>
<th>Family hostels</th>
<th>Stalls and stores</th>
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<tbody>
<tr>
<td>1982</td>
<td>260</td>
<td>1</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>1985</td>
<td>2990</td>
<td>25</td>
<td>18</td>
<td>45</td>
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<td>1990</td>
<td>4020</td>
<td>32</td>
<td>60</td>
<td>190</td>
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<td>1995</td>
<td>7080</td>
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<td>1999</td>
<td>8585</td>
<td>49</td>
<td>196</td>
<td>326</td>
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<td>2004</td>
<td>5005</td>
<td>35</td>
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<td>302</td>
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</table>

seen as a turning point for after this packaged tours began operating in the destination. Also in this stage, more lodging facilities were built within the park boundary (i.e., Luoguta, Shuiraoismen, and Yuanjiajie). As shown in Table 1, the number of family hostels/hotels/beds increased from 0, 1, and 260, respectively, in 1982 to 18, 25, and 2590 in 1985. Likewise, the number of stalls and stores increased from 20 in 1982 to 45 in 1985.

As with the exploration stage, painters, journalists and other celebrities continued to play an important role in publicizing the park through their visits and publications. However, the difference was that some were now being invited by the park administration and local government. For example, the park invited over 30 journalists and editors from Hong Kong, Macao, and Taiwan in 1986. Also, the park administration and local government took a further step to go outside of the park to market the area. Six promotional teams were organized to travel across the country holding photo exhibitions in 1987. The Tourism Bureau of Hunan province displayed the park’s pictures and photographs in the USA and Japan in the same year.

Additionally, scientists and researchers from the China Academy of Science and other universities began to study the geology, vegetation, climate, and landscape in the area. Government officials from the Ministry of Geology, National Tourism Administration, and National Environmental Protection Administration also often visited the area. In addition, leaders from the central government, including the then prime minister and VIPs from foreign countries (i.e., Belgium prime minister) visited the park. These visitations have increasingly made the park more popular and significant.

The government still played an essential role in the development of the park during this stage. A ‘Tourism Construction and Development Leadership Group’ was formed in 1982 under the Xiangxi Autonomous Prefecture of Tujia and Miao Nationalities, the only autonomous prefecture for minority nationalities in Hunan. In 1983 Zhangjiajie National Forest Park Administration, a government agency at the County level was established to manage the park as well as three villages: Zhangjiajie village, Yuanjiajie village, and Xiejiayu village. The park prepared a book, Interpretation for tourist guides, in 1984. In the same year, a vocational tourism school, Dayong Vocational Tourism School, was established. One year later the first travel agency in the area—Zhangjiajie National Forest Park Travel Agency was created. Subsequently, in 1988, Dayong Travel Agency, affiliated with the China International Travel Agency, was established. The first hotel, Dayong Hotel, in Dayong city, commenced construction in 1985.

Government also played an important role in planning and regulating the park. The first plan Zhangjiajie National Forest Park Master Plan—1983–1985 was prepared in 1982 by several sectors of the province. Several regulations were enacted during this stage, including the first by Dayong County in 1983. In 1985 Xiangxi Autonomous Prefecture of Tujia and Miao Nationalities approved a foreign cooperation plan of economics and technology, emphasizing a transition of economic activities from a traditional agriculture-oriented one to those related to tourism sectors. In 1985 the state council agreed to build a civil airport, Lotus Airport, near the city. In 1988 Dayong City was promoted as a prefecture-level city and Wulingyuan District, which directly manages the park and other nature reserves, was established in the same year.

It is worth mentioning that the construction of the park in this stage was primarily funded by the central and provincial governments with a total amount of 12 million RMB being invested in the construction of the park (Xia, 2004).

### 5.1.3. Development stage (1989–1999)

This period marked a rapid increase in visitor numbers. The park accommodated 381,500 visitors in 1989. Ten year later, this number jumped to 1,187,400 in 1999 (Fig. 2). The total visitor number reached 7,941,900 during this period with annual average arrivals being 721,991, approximately 2.3 times that of the involvement stage.

Parallel with the rapid increase of visitors was the rapid development of the park and surrounding areas, which was characterized by (1) internationalization, (2) regionalization, (3) modernization, and (4) physical transformation (as will be discussed at more length in the next section).

First, the park director was invited by Maine University to visit several national parks in the USA in 1989. The first international cooperation agreement between the city and travel agents of former Soviet Union was signed in the same year. The first Zhangjiajie International Forest Protection Festival advocated by the then vice-governor of Hunan province was held in 1991 and has become an annual event since then. Several international academic conferences and several sports festivals were held at the park (i.e., 1991 international ecology and forestry conference, 1992 international Forest Protection Cup climbing contest, etc.).

The park and its two adjacent nature reserves gained its international reputation by being listed as a World Natural Heritage site by the UNESCO in 1992. During this time period, foreign capital and technology were used to build hotels and other tourism related facilities. For instance, Dayong hotel was expanded and revamped using foreign investment and renamed Xianglong International Hotel. A Taiwanese company invested in a cableway with a horizontal distance of 863 m that was built in 1997. In addition, the so called world’s highest outdoor sightseeing lift commenced construction in 1999 (to be finished in 2002). The project was jointly invested with a total investment of 120 million RMB by three companies, including Mackarl in the USA. The lift itself was produced by a German company.

Secondly, the establishment of the WSHIA with the ZNFP with the core attractive zone created an additive regional effect, in that the whole scenic area covering a
total area of 397 km² with a population of 44,954 became one of the largest tourism destinations in the country. The existence of the scenic area also promoted the development of many other scenic areas and spots in the western province.

Finally, during this time period, the park and surrounding areas became increasingly modernized. Zhangjiajie airport was officially opened for commercial use in 1994. Dayong City was renamed as Zhangjiajie City in the same year. The city was renamed using the park’s name. The three Chinese characters also imply ‘opening family door to outside world.’ Visitors from China’s major cities, including Hong Kong and Macao can now fly directly to the city. As of 1999, apart from two airlines to Hong Kong and Macao, another 23 domestic airlines were in operation. The airport accommodated appropriately 500,000 visitors in that year.

As in previous stages, government still played an essential role in speeding the development of the park and surrounding areas. For instance, in 1993 the WSHIA Administration was established. The then state president Zheming Jiang visited the park in 1995 and proposed to “develop Zhangjiajie into a domestically and internationally known tourism destination.” In the same year, the first tour train in the province from Zhangjiajie to Guangzhou, named Zhangjiajie, was operated. In addition, The WSHIA Master Plan prepared by Tongji University and Hunan Construction Commission was approved in 1993. In the same year, the Dayong City Tourism Industry Management Regulation was promulgated. In 1996, priority was placed on tourism by the city municipality with ‘tourism as the locomotive to drive regional economic development.’

With this said, the role of entrepreneurs through their multinational investments cannot be ignored. Without those investments, the park could not be developed and transformed as it is.

5.1.4. Consolidation stage (2000–present)

The park entered the consolidation stage in 2000. During this stage, a total of 7,496,800 tourists visited the park (from 2000 to 2005) with an annual average of 1,124,947 tourists, about 1.7 times as many as that for the development stage (Fig. 2). Facility development in the park began to slow (as discussed in the next section) while priorities were placed on external factors, including regional ground transportation expansion and improvement for domestic travellers and marketing and advertising for international visitors, which could have long-term impacts on the sustainable development of the park. The area’s economy became largely tied to tourism during this time as shown below.

A highway connecting Changde, a major city 137 km to the east, to Zhangjiajie started in 2002 and was completed in 2005. As a result, the travel time from Changde and Changsha to the park was reduced by half. More importantly, the park became yet more accessible through ground transportation than before because of the connection of this route to the rest of the national highway network.

Since 2001, continuous efforts have been made by governments at various levels to market and advertise the park to international audiences with South Korea being the principal target. In this period the general secretary of the city led several groups of delegates from travel agencies and relevant sectors to visit Dalian where many Koreans are concentrated. They also visited Korea to market the park and WSHIA to Koreans directly. In addition, the China National Tourism Administration and the Tourism Administration of Hunan province also endeavored to advertise the area to Koreans. As a result, Korean visitors increased from 102,400 in 2002 to 220,000 in 2004 and jumped to 360,000 in 2005 (Deng, 2006; Wan, Du, & Tian, 2004). It is anticipated that Korean visitors will continue to increase in forthcoming years given that a non-stop flight from Zhangjiajie to Seoul began to operate in 2005. Moreover, in order to impress Korean visitors and make them feel at home, the park hired over 400 tourist guides who can speak fluent Korean. Currently, even the local peasants and peddlers can speak simple Korean in order to sell their products. Korean became one of three languages...
in the park’s interpretation signs (the others are Chinese and English).

Since the Korean market primarily comprises older visitors and that country’s total population is not large, the park has a concern that the Korean market will eventually be saturated. With this in mind, the park and the WSHIA began to look for substitute markets with North America as the main target. A recent first ever publication of an article about the area by Winchester (2007) in the New York Times marks the potential beginning of a new wave of international marketing or even a new wave of tourist arrivals for the park.

5.2. Environmental, social/cultural, and economic changes

5.2.1. Environmental changes

The park’s environment was well protected before the exploration stage. However, the natural appearance of the park has gradually changed since the involvement stage onward. This happened drastically during the development stage wherein the park environment has been largely transformed. The spatial pattern of residential houses and built facilities at the exploration phase was dispersed and dotted, but evolved into a linear pattern during the involvement period with more lodging facilities built around Luoguta, Shuiraosimen, and Yuanjiajie (Fig. 3). The development stage featured further ribbon development. The success of the first hotels acted as a catalyst for more hotels to be built, and these were built behind the first hotels because land close to the roads became less available. Thus the hotels spread out little by little along the road leading to the main entrance of the park and a ribbon development pattern was formed. Some indoor businesses were moved outside as stalls and booths for the purpose of visitor’s convenience. During this period, two more visitor villages emerged around Shuiraosimen and Yuanjiajie, while Luoguta as a residential location and visitor village was rapidly expanded (see Fig. 3). As can be seen from the figure, the park was fragmented in 1998 when compared to 1987. This is particularly true in Shuiraosimen, Yuanjiajie, and downstream GWS.

With the process of physical transformation, the number of beds in the park was increased from 4020 in 1990 to 8585 in 1999. The rapid transformation of the park environment and the whole WSHIA shocked officers from the UNESCO world heritage commission when they visited the park in 1998. They warned that uncontrolled tourism development in the park was destroying its scenic beauty. Partially in response to this warning, the park has begun to implement a removal plan since the end of 2000. As a result, as the park has developed visitor facilities to their fullest, it then became time to control this development. This control represents a consolidation phase. From 2000 onwards, quite a number of buildings located in Shuiraosimen and Yuanjiajie that were considered a threat to the ecological integrity of the park environment were demolished and removed. Consequently, the number of beds decreased from 8585 in 1999 to 5005 in 2004 (Table 1).

As a result of increasing transformation and commercialization of the park environment, the park’s air quality and ground water quality have deteriorated over time and problems peaked at the development stage. In addition, wildlife and their habitats have been largely disturbed. With reference to the air quality of the park, the main polluting sources are coal and oil consumption, and gas emissions from vehicles (Shi, 2005) that are concentrated in three locations: Luoguta, Shuiraosimen, and Yuanjiajie. As shown in Table 2, coal consumption was 70 t in 1981 (the exploration stage). This increased to 1200 t in 1985 (the involvement stage) and jumped to 6100 t in 1998 (development stage). Accordingly, the amount of pollutants for SO$_2$, NO$_x$, and smog increased exponentially from the exploration to the development stage. Shi (2005) also reported, based on a pollution index analysis, that air quality in Luoguta was moderately polluted in 1984 and 1988 (the involvement stage), but was severely polluted each year from 1993 to 1999 (the development stage).

Ground water in the park has also increasingly deteriorated over time as a result of the increasing consumption of water and discharge of sewage (Table 3). For example, water consumption increased from 6000 t in 1981 (the exploration stage) to increased to 20,000 t in 1985

![Fig. 3. The built-up area change of ZNFP.](image)

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Coal consumption and resulting emission of pollutants (unit: tons)</th>
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</thead>
<tbody>
<tr>
<td>Coal consumption</td>
<td>70</td>
</tr>
<tr>
<td>SO$_2$</td>
<td>4.20</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>0.25</td>
</tr>
<tr>
<td>Smog</td>
<td>6.44</td>
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after the middle 1990s as I did when I was young. I have not drunk the water directly from the stream at all. However, I have always seen white foams on the surface of water. But the colour of stones under the stream has become gray and black.”

Biodiversity in the park has also been adversely impacted by tourism development. Activities such as quarrying rock, building roads and paths, logging, planting, constructing gardens, and other activities pursued by visitors are among the negative impacts affecting wildlife behavior and their habitats. These activities have destroyed the integrity of the natural ecosystem, reduced the migratory and movement frequency of animals, reduced the diffusion speed of plant seeds, and fragmented wildlife habitats. Consequently, the richness of park biodiversity is lower than before. According to the data derived for this study, the number of species and mammal population of the park have decreased since 1980. Significant examples include species such as red dog (Canis lupus), musk deer (Moschus berezovskii), goral (Nemorhedus goral), Asiatic black bear (Selenarctos thibetanus), clouded leopard (Neofelis nebulosa), and masked palm civet (Paguma larvata), which are no longer present within the park. In addition, the population of rhesus monkeys (Macaca mulatta) has decreased from approximately 30 in 1982 to 7 in 2003. Shi (2005) also examined the fauna diversity of the park by looking into the extent to which local residents can perceive the existence of a particular species. He found that 87%, 80%, and 94% of respondents reported that birds, beasts, and reptiles were, respectively, visible in the late 1970s (the exploration stage). However, this perception rate reduced to 56%, 38%, and 39%, respectively, during the late 1980s (the involvement stage), and dropped rapidly to 35%, 16%, and 7%, respectively, during the late 1990s (the development stage).

5.2.2. Socio-cultural changes

In 1982, there were 1092 permanent residents in the park, including a small number of non-agricultural population of 74. Twenty-three years later, the permanent population increased to 3495 with the majority of the population being non-agricultural residents, totalling about 2630 in 2005 (Table 4). This growth in total population is a direct consequence of people migrating from the rest of the country to the park seeking better jobs and higher incomes. This drastic increase of a non-agricultural population signifies the transition of the area from being agriculturally oriented to tourism oriented. The survey for this study indicated that 60.8% of local residents’ incomes were primarily from tourism. In addition, 87.9% of local residents reported that their quality of life was positively affected by tourism development. And 93.4% of respondents preferred developing tourism for more income rather than limiting its development for a quiet living environment. Similar findings were also reported by Wu and Liu (2003).

Previous studies have found that tourism development in the park has generated negative impacts on local residents in terms of the retention of local cultural traditions (Wu &...
that attracted tourists in the first place (Zhang & Ouyang, 2003). In our visitor survey, 86.3% of respondents reported that they did not feel a strong ethnic ambience during their stay in the park and only 7.7% of participants perceived that local residents were hospitable and friendly. This suggests that local residents’ friendliness towards tourists has gradually faded over time. Instead, they are more interested in earning more and more. In the case of local residents’ perceptions of tourists, 54.5% of respondents reported that they ‘liked’ or ‘liked very much’ the way tourists were dressed, while only 2.5% of them expressed a very negative view about the way tourists dressed.

With tourism development in the park, opposition and discontent among local permanent residents increased and peaked in the consolidation stage. One major issue is related to residency relocation, a plan implemented since 2000 in response to the UNESCO warning that the whole WSHIA, particularly ZNFP, has been largely transformed. For example, a recent survey conducted by Li (2007) indicated that 56% of residents were willing to move outside of the core areas. However, a significant number of residents remained reluctant to do so, mainly for two reasons. First, they were not satisfied with the relocation compensation that varied between villages. Second, finding a new job in a new place was not easy for most of them. It seems that the local government has not heeded local residents’ opinions, which has resulted in several petitions against the local government (Li, 2007).

The tourists’ experience, particularly nature-based experience, was largely impacted adversely by increasing commercialization and the transformation that took place in the transition from the exploration to the development stage. One tourist interviewed for this study said it felt like he was in a commercial zone of a big city when they came to Luoguta. In addition, many peddlers who are local residents are present in the park. According to a tour guide, although local residents earned extra money by selling souvenirs and other local products to tourists, they also negatively affected tourists’ experience by persistent pestering, especially when they forced tourists to buy their merchandize. A local tourism company manager also complained that some areas within the park are too commercial, causing the disappearance of local natural and cultural characteristics and so putting at risk the features that attracted tourists in the first place (Zhang & Ouyang, 2004).

Landscape change and some destruction have negatively impacted on the aesthetic quality of the park. It has destroyed the integrity and authenticity of the natural landscape that visitors come to see. One study evaluating the park’s landscape and its aesthetics indicated that the main negative factor affecting the quartz sandstone landscape of the park was the built environment of accommodation facilities and services (Zhou & Yu, 2004). In this study, all 179 interviewees reported that the aesthetic quality has become worse when human facilities became embedded in the natural landscape.

5.2.3. Economic changes

Although this area was only 30 km from the nearest town, Dayong, in the early 1980s, there were no major roads connecting the area to the rest of the country because of its mountainous nature. Local residents who lived in Zhangjiajie village and Yuanjiajie village mainly depended on agriculture and forestry to make a living with the average annual individual income being about 193 RMB in 1981. Local residents’ income increased rapidly since the involvement stage onwards. For instance, the annual average income per capita increased to 4000 RMB in 2002 (Zhangjiajie National Forest Park Administration, 2004). According to one resident interviewed in Yuanjiajie, before 1982 the village was isolated from the outside world. It took him about 4 h to walk from the village to the nearest highway. His life was entirely dependent on crops. The villagers often borrowed foods from other places due to the shortage of rice. After 1983, increasing numbers of visitors came to the village. And the villagers began to make money by providing accommodation and food for tourists. The revenue from tourism in several families now exceeded that from agriculture. The revenue for the park increased, too. The gross product of the forest farm in 1981 was 268,000 RMB and the average annual personal income was 640 RMB for park staff (Wang & Zhang, 1996). Since 1982 when the farm became a national forest park, the park revenue increased rapidly during the involvement stage from 1981 when it was 558,800 RMB to 1988’s 9,101,500 RMB. The total revenue during the period was 2,940,100 RMB with an average being 420,014 RMB. Although revenue fluctuated during the development stage, the general trend was upwards. Revenue increased from 6,844,200 RMB in 1989 to 23,808,000 RMB in 1999 with a total amount of 250,526,900 RMB with the average being 22,775,172 RMB, approximately 54 times as much as the annual average revenue for the involvement stage. During the consolidation stage, the total revenue of 511,642,300 RMB was generated from 2000 to 2005 with an average being 85,273,717 RMB, about 3.7 times the annual average revenue for the development stage (Fig. 2).

Tourism development in the park and the whole WSHIA promoted economic development for Zhangjiajie City; this was particularly the case in the consolidation stage. For instance, in 2002, 59% of the city’s tax revenues were from tourism and related sectors while in the early 1990s this percentage was about 20% (Liu, 2005). In 2005 the city’s tourism related industry accounted for 54.4% of city’s GDP (Liu, 2006). The industry structure has been rapidly transformed from the primary sector and secondary sectors to a tourism related tertiary sector oriented with the ratio being 17.9:27.7:54.4, respectively, in 2005 (Liu, 2006).

While acknowledging the positive effect of the economic development on local residents and the whole region, it appears that income leakage existed, at least from the perspective of local residents, with the increasing development of the park. For instance, because of the construction and operation of the sightseeing lift, fewer tourists took...
sedan chairs rides. As noted by one local resident of Zhangjiajie village, “My husband is a sedan chair carrier for visitors. His business has become worse since the sightseeing lift was in operation in 2002 because most visitors preferred to take the lift to the top of the mountain instead of hiking along the trail which is more physically and mentally challenging.” In our survey, when asked about the fairness of the distribution of tourism income among villagers, only 18.2% considered that the income distribution was ‘very fair’ while 81.9% of respondents reported it was either ‘basically fair’ or ‘unfair.’

Entrepreneurs are the stakeholders that have received most benefit. For example, the Tianzi Mount cable chair concession operation had sales of about 500 million RMB in 2002. This figure is more than the District’s financial income of 300 million RMB in 1998 (Zhang, 2002), and only a little less than the District’s total revenue from entry fees of 660 million RMB in 2005. According to Zhang (2002), economic benefits that local government and communities have received from tourism development are certainly less than investors’ profits.

In sum, the park has been transformed considerably since its inception. Certainly the change of physical appearance was the most salient impact according to local residents in our survey. When asked about the extent to which local environment and socio-economic characteristics have been affected owing to tourism development of the park, 37.1% of respondents considered that the natural environment was affected most, followed by the socio-economic structure (31.4%), local life (18.6%), and local customs (10.0%).

6. Discussion

The TALC has been rarely utilized in previous studies with reference to tourism and the development of national parks and other protected areas. Certainly the concept has not been applied to China’s protected areas, including forest parks. This study examined its application to China’s first national forest park—ZNFP. In addition, factors affecting the park’s tourism development and associated environmental, socio-cultural, and economic changes were also analyzed. Findings indicated that the park has experienced four stages (i.e., exploration, involvement, development, and consolidation stages) that confirm Butler’s (1980) paper. For example, in the exploration stage the park was visited by pioneers who made the park increasingly popular among the public. At the involvement stage, government and public agencies began to provide or improve transport and other facilities for visitors. A mass tourism market began to emerge at this time. After that, the park entered a development stage characterized by a rapid increase of tourists as well as a decline in local control of the development. In addition, changes in the physical appearance of the park became very noticeable. Finally, at the consolidation stage, the area’s economy became largely tied to tourism. Marketing and advertising were wide reaching and efforts were made to attract international tourists and to tap into other tourist markets. International tourism (e.g., South Korean) increased significantly. These four distinct stages that the park has experienced have not supported either Baum’s (1998) assertion that the model has rather less value when applied to developing countries, nor Weizenegeb’s (2006, p. 137) argument that “the model can be applied to protected areas to a limited degree only.”

The identification of these four stages was further confirmed when comparing tourist numbers and revenues from one stage to the next. At the involvement stage, the annual average arrivals were 11 times that of the exploration stage, while at the development stage, the annual average arrivals were 2.3 times that of the involvement stage. During the consolidation stage, this figure was 1.7 times that of the development stage. Although tourist numbers have increased from 2000 to 2005, the rate of increase was relatively low during the consolidation stage when compared to the previous stages.

Furthermore, it was found the model applies to the park very well by reference to the relative changes of revenues for each stage. Specifically, at the development stage, the annual average revenue was 54 times that of the involvement stage. However, this trend slowed significantly when the park entered the consolidation stage, wherein the number was about 3.7 times that of the development stage.

With this said, obvious discrepancies still exist. First, visitors outnumbered local residents right from the beginning of the process and remained so until the park reached the consolidation stage. It was only in the later part of the consolidation stage that visitors reached or even outnumbered the regional population of 1.56 million. This suggests that the ratio between tourists and local residents as a characteristic for the consolidation stage did not conform to usual understandings of the TALC in this case. However one must note the role of the ‘open door policy’ and that, from 1978 onwards, China has seen rapid economic development. The rapid improvement of people’s living standards and the formation of positive attitudes toward leisure and tourism has motivated travel, while the Golden Week (i.e., three annual 7-day national holidays) implemented in 1999 by the central government has stimulated travel. In this sense, tourism development of the park mirrors the national development.

A second difference is that while Butler’s hypothesis states local residents are the primary providers of accommodation at the exploration and involvement stages, in this case yet even more residents provided accommodation in the latter stages. For example, in our survey on local residents, 7.3% of respondents reported they provided lodging for tourists before 1982, but this percent had increased to 29.0% in 2004. This increase is partly explained by the ZNFP and local government encouraging local resident participation in hospitality provision in the form of family hostels as a means of income generation.
A third difference lies in the park having had its fullest infrastructure during the development stage. That is, road construction, artificial facilities, and other ancillary facilities had either been completed or commenced during this stage (e.g., the sightseeing lift). No more spaces are now available for further facility development and road construction. As a result, physical carrying capacity has been reached. In addition, the environmental quality of the park declined to a point below national standards, suggesting environmental capacity has been exceeded. This suggests that it was during the development, not stagnation stage as described by Butler (1980), that carrying capacities were reached. In contrast, environmental quality was improved during the consolidation stage because of the use of environmentally friendly buses, recycling of sewage, and reduction of coal consumption (Bu, 2006). Carrying capacities are not fixed. Rather, they are dynamic. Physical capacity in the park increased rapidly during the development stage as described above. For example, the construction of paved road networks, the sightseeing lift, and the cableway system sped up the rate of tourist movements in the park, thereby increasing physical carrying capacity.

Fourth, tourist numbers have not fallen as a result of environmental decline and the loss of opportunity for an ‘authentic’ nature based tourism experience. This could be explained by four reasons. First, the park’s landscape is unique and second to none in China or even worldwide. Second, although the construction of the sightseeing lift is controversial, its main transport function may also be an attraction for tourists. Third, sightseeing is the prevalent activity in the park. Tourists visiting the park may not come for the purpose of being in close contact with nature. Rather, they came to marvel at the wonder of nature, and then be whisked away to other places. These tourists can be considered as soft ecotourists who have a high requirement for convenience and comfort, e.g. in transport. This is particularly the case for Korean visitors, many of whom are elderly and in packaged tours with low levels of physical challenge. Such tourists are less likely to be critical of artificial facilities in the park. In this study the majority of visitor respondents (54.4%) were highly supportive of the construction of the cable trams while only 19.9% were strongly against. Likewise, local residents’ attitudes were also very supportive. For instance, 49.0% of resident respondents were either ‘supportive’ or ‘very supportive’ of the existence of the lift and 58.0% of them either ‘agreed’ or ‘strongly agreed’ with the construction of the trams. Finally, the majority of tourists (72.7% in our survey and 84.2% in Luo, 2006) are first time visitors. Thus, while crowding is reported by most visitors to be a major issue in peak seasons (Luo, 2006) and visual disturbance adversely affects visitor’s satisfaction, given that many are one-time visitors such negative experiences will only very slowly negatively impact on future visitor numbers. Thus, Plog’s assertion that “destination areas carry with them the potential seeds of their own destruction, as they allow themselves to become more commercialized and lose their qualities which originally attracted tourists” (Butler, 1980, p. 6) seems to not apply to a destination that is mostly visited by non-repeat visitors, as evidenced by the park.

A fifth difference is that while sightseeing of the unique scenery is and will continue to be the dominant tourism activity in the park, it can be anticipated that even when the park enters its stagnation stage, “heavy reliance on repeat visitation” (Butler, 1980, p. 8) will continue to be unimportant. This challenges Lundtorp and Wanhill’s (2001) argument that the TALC model can only apply to those destinations whose visitors are repeaters.

Finally, the park was made public by pioneers such as journalists, painters, and photographers at the exploration stage who have continued to visit the park through the consolidation stage and beyond, and have in fact been joined by others of similar interests.

The evolution of the park’s tourism development has been a function of many factors, including consumers, government, entrepreneurs, and tour operators/agencies. First, the increase of visitors in a large number prompted the increase in facilities and services in the park to meet the needs of tourists. The park is 30 km from Zhangjiajie City, and it takes at least 2 days to visit the most attractive scenic spots within the park. In addition, living in or adjacent to the park can offer more chances to view the park scenery. Thus, many visitors chose to stay in or adjacent to the park during their visitations. This stimulated investors to build more facilities in or adjacent to the park, and consequently increased the transformation of the park environment.

Government has played a crucial role in planning, regulating, and coordinating the park’s development. The planning process involved several sectors from solely within the province at the involvement stage, but later development involved regional consideration with experts from other provinces becoming engaged in further planning. The planning was then carried out at the national level at the consolidation stage with policy makers and experts from the central government being the major actors. With this said, irrational planning at the early stage of the park’s development has contributed to the environmental deterioration. In 1984, a master plan of the park adhered to the planning principle of maximization of visitor satisfaction, but ignored the fact that Luoguta lies in the upper area of the GWS watershed. Luoguta in the plan was regarded as the reception area of the park. Thus more and more waste water flowed into the GWS with the increase of overnight visitors in this area. In 1992, the master plan of WSHIA including the park was approved by the Ministry of Construction of China. The idea of constructing a sightseeing lift was proposed in that plan. Since this park was designated a UNESCO world heritage site in December 1992, many environmental experts opposed this idea because of its magnitude and the fear it would destroy the integrity of the landscape. According to the Convention Concerning the Protection of the World
7. Conclusion

The park has experienced the first four stages as described by Butler in his seminal article. Since its establishment in 1982, the park has been transformed over the past two decades from a less accessible forest farm to a world renowned tourism destination now accessible by trains, vehicles, and airplanes. The macrosocial and economic change since 1978 when China adopted an open-door policy, has seen governments at all levels, celebrities, and entrepreneurs all playing essential roles as catalysts in this rapid transformation. Government officials, at all levels, have been major players from the very beginning in planning, regulating, and directing where the park should go and how, through personal visitations and comments, policy making, granting privileged land use for concessionaires, events organizations, and domestic/international marketing.

Although theoretically the park will enter a stage of stagnation and then post-stagnation stage, it seems that dramatic and total decline is unlikely to occur because such a decline is unacceptable both economically and politically (see Agarwal, 1994), given the region’s heavy reliance on tourism and the public nature of the destination. Government intervention and regulation is inevitable. However, this does not apply to particular segments of the tourism market. For example, the Korean market, which started and rapidly increased during the consolidation stage, may experience its own micro-life cycle, in that the market will become saturated and then decline or even exit from the destination. In foreseeing this possible future, the park has taken a proactive measure to start focusing on the North American market. This potential market may emerge before the Korean market declines and may also experience its own cycle from growth to stagnation and even to exit. Thus, in the long run, the area may be described by Handy’s (1994) sigmoid curve, wherein old products may exist in tandem with newly introduced ones (also see Baum, 2006). The sequential entry of new market segments may also follow the shape described by Haywood (1986), wherein a standard S curve shape may not be followed in the same way by each segment.

This micro-life cycle may also be experienced by any given segment of the domestic market. For example, repeat visitors may become less likely to visit if they have visited more than once because of the nature of activities being largely related to sightseeing. In addition, those who come to seek the authenticity of being close to nature may turn to other places after their first visitation because of the park’s loss of naturalness and increase of commercialization. It is hard to say that such micro-life cycles, as experienced by a given market segment for the park, will significantly affect the long term sustainability of the park, given its uniqueness and the fact that domestic visitors are and will remain as the main market component.
Butler (1980, p. 9) argued that “only in the case of the truly unique area could one anticipate an almost timeless attractiveness.” With this said, the park should take the TALC as a warning by which long term sustainability can be achieved or enhanced through constant adjustments, corrections, and proactive actions. The park is a core component of the WSHIA, which belongs to the Category V (Protected Landscape) in the IUCN system of protected area categorization. Category V protected areas emphasize the interaction of people and nature. According to the IUCN, Category V protected areas should be ‘models of sustainability’ (Phillips, 2002). This is in parallel with the TALC, in that maintaining or enhancing sustainability of a destination requires understanding the process of tourism development in any area (Butler, 2006c).

The main limitation of this study lies in the fact that the park has not completed its cycle of development. Thus, it may be too early to say that the model entirely applies to the park. However, since the park has experienced the first four stages, it may enter its stagnation sooner or later. Therefore, from the perspective of sustainable development, the park and other government sectors should take pre-emptive measures to prevent its stagnation or decline so that long term sustainable development can be achieved. It seems that the park and the municipality have anticipated this problem by extending marketing efforts to other international audiences such as North America. Nonetheless, it can be anticipated that the consolidation stage will be maintained for a long time considering the improvement of regional ground transportation which makes do-it-by-yourself tourism possible for those who own cars.

Future research may need to be conducted to monitor the change in given segments of both the domestic and international markets. Also, the dynamic changes of local population should be monitored and examined in relation to the TALC model. For example, youth retention is an issue in the area. Owing to the low paid jobs offered to local residents, young adults tend to migrate to other places (mainly large cities) to find better paying jobs. In the meantime, well educated outsiders come to the area seeking good jobs and more incomes. These outsiders may not be as concerned about the environment as existing locals because they have not developed an emotional or place attachment to the park. This increasing emigration of young adults and immigration of outsiders may destabilize the basis upon which long term sustainability can be built.

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